

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1-3, 7, 9, and 11, withdraw from consideration claim 12 and ADD new claims 13-21 in accordance with the following:

1. (CURRENTLY AMENDED) A repair order receiving and sending system using a customer's unnecessary assets operated on a repairer server, in which the repairer server, a repair requester terminal used by a repair requester, and a component providing candidate terminal used by a component providing candidate are connected to each other on a network, ~~the repairer server comprising:~~

a component information database storing components and products using the components so that they correspond to each other;

an owner information database storing identifiers of customers owning the stored products in the component information database, as potential component providers;

a repair request information receiving part ~~for~~ receiving repair request information ~~at least containing~~ comprising failure information on a product to be repaired and a desired repair fee, transmitted from the repair requester terminal;

a repair component specifying part ~~for~~ specifying a repair component, based on the failure information;

a component providing candidate selecting part ~~for~~ searching the component information database and the owner information database based on the specified repair component, thereby selecting at least one ~~or a plurality of~~ customers owning at least one ~~or a plurality of~~ products ~~including~~ comprising the repair component, as ~~the~~ a component providing candidate;

a reference purchase price input part ~~for~~ repairer's ~~inputting~~ inputting a reference purchase price based on the desired repair fee;

a purchase component information notifying part ~~for~~ notifying the selected component providing candidate of purchase component information ~~at least containing~~ comprising information ~~for~~ specifying at least a component desired to be purchased and the reference purchase price of the component desired to be purchased to each of the

selected component providing candidates;

a selling component information receiving part ~~for~~ receiving selling component information ~~containing~~ comprising a respective, desired selling prices of the repair components from ~~the each of the~~ component providing candidates;

a component provider selecting part ~~for~~ selecting a component provider from the selected component providing candidates based on the selling component information;

a repair fee input part ~~for~~ inputting a repair fee ~~presented~~ presentable to the repair requester; and

a repair information sending part ~~for~~ sending repair information ~~at least containing~~ comprising the repair fee to the repair requester terminal.

2. (CURRENTLY AMENDED) A The repair order receiving and sending system ~~using customer's unnecessary assets~~ according to claim 1, wherein the selling component information receiving part receives the selling component information together with information ~~for~~ determining a residual value of the repair component, and ~~the repairer server~~ further ~~comprises~~ comprising:

an evaluation value calculating part ~~for~~ calculating an evaluation value, which is an index ~~for~~ evaluating a residual value of the repair component ~~on the~~ corresponding to each component providing candidate ~~basis~~, based on the desired selling price and the information ~~for~~ determining a residual value of the repair component, and the component provider selecting part selects the component providing candidate that provides the repair component with the highest evaluation value as a component provider.

3. (CURRENTLY AMENDED) A The repair order receiving and sending system ~~using customer's unnecessary assets~~ according to claim 1, wherein ~~the repairer server~~ further includes comprising:

an order sending information receiving part ~~for~~ receiving a notice of order sending information from the repair requester; ~~terminal~~, and

a selling request notifying part ~~for~~ notifying the component provider that the product or the repair component is purchased at the desired selling price, based on the order sending information.

4. (WITHDRAWN) A repair order receiving and sending system using customer's unnecessary assets operated on a provider server provided by a provider, in which the provider

server is connected to a repairer terminal used by a repairer and a repair requester terminal used by a repair requester on a network, the provider server comprising:

- a repairer database storing the repairers and products that can be repaired by the repairers so that they correspond to each other;

- a repair request information receiving part for receiving repair request information at least containing information for specifying a product to be repaired and a desired repair fee, transmitted from the repair requester terminal;

- a candidate repairer extracting part for searching the repairer database based on the information for specifying the product to be repaired, and extracting one or a plurality of candidate repairers that can repair the product;

- a repair request information notifying part for notifying the repairer terminal used by the candidate repairer of repair request information from the repair requester;

- a repairer selecting part for selecting the candidate repairer with the lowest repair fee as a repairer, among the entire input repair information; and

- an order notifying part for notifying the repair requester terminal of the repair information and order receiving, and an order sending notifying part for notifying the repairer terminal of order sending.

5. (WITHDRAWN) A repair order receiving and sending system using customer's unnecessary assets according to claim 4, comprising a repair information notifying part for notifying the repair requester terminal of all the repair information sent from the repairer,

- wherein the repairer selecting part selects a repairer selected by the repair requester based on the repair information for sending an order, and sent from the repair requester terminal, and

- the order notifying part notifies the repairer terminal used by the selected repairer of the order.

6. (WITHDRAWN) A repair order receiving and sending system using customer's unnecessary assets according to claim 5, comprising an order receiving part for receiving confirmation of order receiving from the repairer terminal that receives the order, and an order notifying part for notifying the repair requester that the order receiving is established.

7. (CURRENTLY AMENDED) A method ~~for~~of receiving and sending a repair order using customer's unnecessary assets in a network environment in which a repairer server, a repair

requester terminal used by a repair requester, and a component providing candidate terminal used by a component providing candidate are connected to each other on a network, the ~~repairer server~~method comprising:

receiving repair request information ~~at least containing~~which comprises failure information on a product to be repaired and a desired repair fee, ~~transmitted~~ from the repair requester terminal;

specifying a repair component based on the failure information;

searching ~~the~~a component information database storing components and products using the components so that they correspond to each other and ~~the~~an owner information database storing identifiers of customers owning the stored products in the component information database as potential component providers, based on the specified repair component;

designating thereby selecting at least one or a plurality of customers customer owning at least one or a plurality of products product comprising including the repair component as the a component providing candidate based on results of the searching of the component information database and the owner information database;

inputting a reference purchase price based on the desired repair fee;

notifying ~~the~~each selected component providing candidate of purchase component information ~~at least containing~~comprising information ~~for specifying a component desired to be purchased and the reference purchase price of the component desired to be purchased;~~

receiving selling component information ~~containing~~comprising a desired selling price of the repair component from the component providing candidate;

selecting a component provider from the component providing candidate based on the selling component information;

inputting a repair fee ~~presented~~presentable to the repair requester; and

sending repair information ~~at least containing~~comprising the repair fee to the repair requester terminal.

8. (WITHDRAWN) A method for receiving and sending a repair order using customer's unnecessary assets in a network environment in which a provider server provided by a provider is connected to a repairer terminal used by a repairer and a repair requester terminal used by a repair requester on a network, the provider server comprising:

receiving repair request information at least containing information for specifying a product to be repaired and a desired repair fee, transmitted from the repair requester terminal;

searching a repairer database storing the repairers and products that can be repaired by the repairers so that they correspond to each other, based on the information for specifying a product to be repaired, and extracting one or a plurality of candidate repairers that can repair the product;

notifying the repairer terminal used by the candidate repairer of repair request information from the repair requester;

selecting the candidate repairer with the lowest repair fee as a repairer, among the entire input repair information; and

notifying the repair requester terminal of the repair information and order receiving, and notifying the repairer terminal of order sending.

9. (CURRENTLY AMENDED) A storage medium readable by a machine tangibly embodying a program of instructions executable by the machine to process a repair order by:~~A recording medium storing a computer-executable program for realizing a method for receiving and sending a repair order using customer's unnecessary assets in a network environment in which a repairer server, a repair requester terminal used by a repair requester, and a component providing candidate terminal used by a component providing candidate are connected to each other on a network, the repairer server comprising:~~

~~receiving repair request information at least containing~~ comprising failure information on a product to be repaired and a desired repair fee from a repair requester, ~~transmitted from the repair requester terminal;~~

~~specifying a repair component based on the failure information;~~

~~searching the~~ a component information database storing components and products using the components so that they correspond to each other and ~~the~~ an owner information database storing identifiers of customers owning the stored products in the component information database as potential component providers, based on the specified repair component, thereby selecting at least one ~~or a plurality of~~ customers owning at least one ~~or a plurality of~~ products including the repair component as ~~the~~ a component providing candidate;

~~inputting a reference purchase price based on the desired repair fee;~~

~~notifying the~~ each selected component providing candidate of purchase component information ~~at least containing~~ comprising information ~~for specifying a component desired to be purchased and the reference purchase price of the component desired to be purchased;~~

~~receiving selling component information containing~~ comprising a desired selling price of the repair component from the component providing candidate;

selecting a component provider from the at least one component providing candidate based on the selling component information;

inputting a repair fee ~~presented~~ presentable to the repair requester; and

sending repair information ~~at least containing~~ comprising the repair fee to the repair requester ~~terminal~~.

10. (WITHDRAWN) A recording medium storing a computer-executable program for realizing a method for receiving and sending a repair order using customer's unnecessary assets in a network environment in which a provider server provided by a provider is connected to a repairer terminal used by a repairer and a repair requester terminal used by a repair requester on a network, the provider server comprising:

receiving repair request information at least containing information for specifying a product to be repaired and a desired repair fee, transmitted from the repair requester terminal;

searching a repairer database storing the repairers and products that can be repaired by the repairers so that they correspond to each other, based on the information for specifying a product to be repaired, and extracting one or a plurality of candidate repairers that can repair the product;

notifying the repairer terminal used by the candidate repairer of repair request information from the repair requester;

selecting the candidate repairer with the lowest repair fee as a repairer, among the entire input repair information; and

notifying the repair requester terminal of the repair information and order receiving, and notifying the repairer terminal of order sending.

11. (CURRENTLY AMENDED) A repair order receiving and sending system using customer's unnecessary assets operated on a repairer server provided by a repairer, in which the repairer server, a repair requester terminal used by a repair requester, and a component providing candidate terminal used by a component providing candidate are connected to each other on a network, the ~~repairer server~~ repair order receiving and sending system comprising:

a repair requester terminal which transmits, from the repair requester, repair request information including failure information on a product to be repaired and a desired repair fee;

a repairer server comprising:

a component information database storing components and products using the components so that they correspond to each other; and

an owner information database storing identifiers of customers owning the stored products in the component information database as potential component providers,

~~wherein repair request information at least containing failure information on a product to be repaired and a desired repair fee is sent from the repair requester terminal to the repairer server, in the repairer server, a repair component is specified based on the failure information, and the component information database and the owner information database are searched based on the specified repair component, whereby at least one or a plurality of customers owning at least one or a plurality of products including the repair component is selected as the a component providing candidate, a reference purchase price is input based on the desired repair fee, and the component providing candidate terminal used by the selected component providing candidate is notified of purchase component information at least containing which comprises information for specifying a product desired to be purchased and the reference purchase price of the product desired to be purchased, and a component provider is selected from the at least one component providing candidate based on selling component information, a repair fee presented to the repair requester is input, and repair information at least containing the repair fee is sent to the repair requester terminal; and~~

a component providing candidate terminal which communicates with the repairer server and transmits selling component information containing a desired selling price of the repair component based on in response to the purchase component information is sent from the component providing candidate terminal to the repairer server, and

~~in the repairer server, a component provider is selected from the component providing candidates based on the selling component information, a repair fee presented to the repair requester is input, and repair information at least containing the repair fee is sent to the repair requester terminal.~~

12. (WITHDRAWN) A repair order receiving and sending system using customer's unnecessary assets supporting repair of a broken-down apparatus,

wherein repair request information at least containing failure information for specifying a product or a component targeted for repair, a desired repair fee, and information on whether or not the use of a second-hand component is accepted is input to go on public on a network,

regarding a repair component specified based on the repair request information and a product including the repair component, public buying on the network is supported,

one or a plurality of estimated repair fees including information on whether or not

the use of a second-hand component is accepted with respect to the repair request information is displayed together with estimators, and

an estimated repair fee targeted for requesting repair is selected from the one or plurality of estimated repair fees, and a repair request with respect to the estimator who presents the selected estimated repair fee is input.

13. (NEW) A method of component repair order processing, comprising:
receiving repair information from a requester corresponding to a product requiring repair;
specifying a replacement component based on the received repair information;
selecting at least one component providing candidate based on the received repair information;

calculating reference purchase information corresponding to an estimate of a maximum purchase price of the specified replacement component;

transmitting the reference purchase information to each selected component providing candidate;

receiving component selling information from each component providing candidate in response to the transmitted reference purchase information;

calculating an evaluation value for each component providing candidate based on the component selling information; and

determining a best component providing candidate based on the calculated evaluation value of each component providing candidate; and

transmitting an order confirmation request to the requester, wherein the order confirmation request comprises an estimated repair price based on the best component providing candidate component selling information.

14. (NEW) The method of claim 13, wherein the repair information comprises failure information on the product requiring repair and a desired repair fee which includes labor and material costs.

15. (NEW) The method of claim 14, wherein the calculating reference purchase information comprises subtracting estimated labor and handling costs from the desired repair fee.

16. (NEW) The method of claim 15, wherein the component selling information

comprises a selling price, remaining warranty period, a product purchase date, a standard component service life, and an estimated remaining life.

17. (NEW) The method of claim 16, wherein the calculating an evaluation value for each component providing candidate comprises calculating the evaluation value based on the selling price, the remaining warranty and the standard component service life.

18. (NEW) The method of claim 16, wherein the calculating an evaluation value for each component providing candidate comprises calculating the evaluation value based on the selling price, the estimated remaining life of the component and the standard component service life.

19. (NEW) The method of claim 16, further comprising:
calculating a negotiating price difference based on the selling price and the estimated maximum purchase price when the selling price of the best component providing candidate is greater than the estimated maximum purchase price;
transmitting a request for a discount price to the best component providing candidate;
receiving an updated component selling price from the best component providing candidate in response to the transmitted request for the discount price;
comparing the updated component selling price to the estimated maximum purchase price, wherein when the updated selling price is less than the estimated maximum purchase price transmitting the order confirmation request to the requester, wherein the order confirmation request comprises an estimated repair price based on the best component providing candidate component selling information, and when the updated selling price is greater than the estimated maximum purchase price determining a next best component providing candidate based on the calculated evaluation value of each component providing candidate and transmitting the order confirmation request to the requester, wherein the order confirmation request comprises an estimated repair price based on the best component providing candidate component selling information.

20. (NEW) A repair order system, comprising:
a database storing information corresponding to replacement parts and sources which is searched, based on a specified target component to find a specified replacement part;
a transceiver which receives a desired repair fee order to repair a product requiring

repair, communicates a request for the specified target component at a maximum purchase price, which is determined based on the desired repair fee order received, to each stored source having the specified replacement part and receives responses from stored sources sending selling information on the specified replacement part; and

an evaluator which determines a highest evaluation value based on the received responses corresponding to each stored source sending selling information on the specified replacement part.

21. (NEW) A method of ordering a repair, comprising:

specifying a replacement component corresponding to a product requiring repair with a desired repair fee;

communicating the specified replacement component to at least one component provider which has the specified replacement component and receiving responses from component providers communicating selling information on the specified replacement component;

determining a component provider with a highest evaluation value based on the respective received responses from the component providers and the desired repair fee wherein, when the selling information of the component provider with the highest evaluation value comprises a price which is below a predetermined maximum price, communicating an order to the component provider with the highest evaluation value, and when the selling information of the component provider with the highest evaluation value comprises a price which is above the predetermined maximum price, communicating a discount request to the component provider with the highest evaluation value.